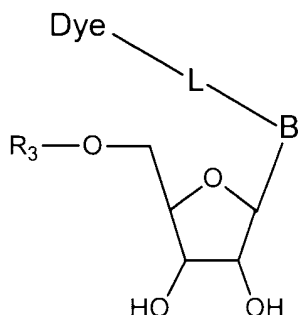


(ii) extending said at least one primer in the presence of a mixture of unlabeled dNTPs and at least one dye-labeled ribonucleotide having the formula:



wherein B is a nucleobase; L is a linker; R₃ is triphosphate, α-thiotriphosphate, or a salt thereof, and Dye is a reporter group;

so that primer extension products that contain at least one dye-labeled ribonucleotide are formed;

(iii) cleaving one or more primer extension products to form a plurality of labeled fragments;

(iv) separating the extension products by size; and

(v) detecting the fragments to determine the polynucleotide sequence.

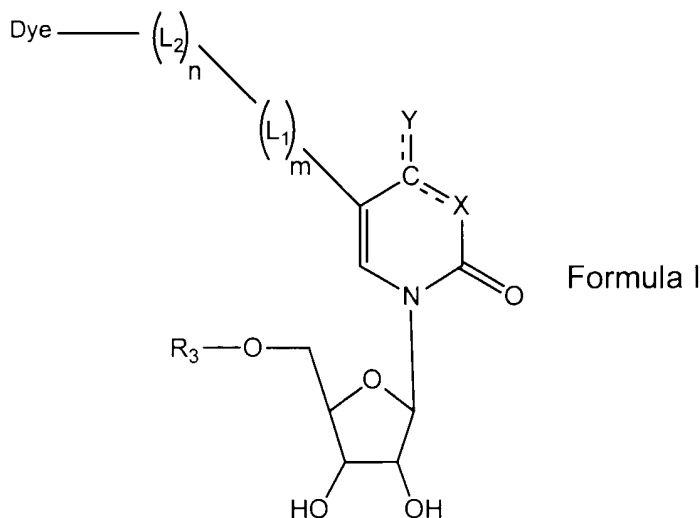
⌈ Please add new claims 124-126, as follows: ⌋

--124. (New) The method according to claim 101, wherein said at least one dye-labeled ribonucleotide is:

G2
(1) a compound of formula I:

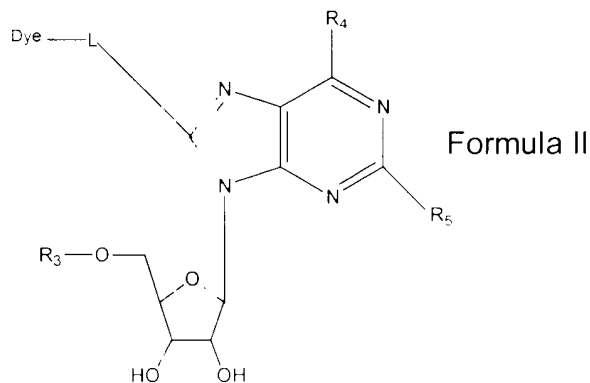
FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER

1300 I Street, NW
Washington, DC 20005
202.463.4000
Fax 202.463.4400
www.finnegan.com



- wherein X is N, NH, or C;
- wherein Y is O or NH₂;
- wherein R₃ is either triphosphate, α-thiotriphosphate, or a salt thereof;
- wherein L₁ is a linker;
- wherein L₂ is a benzylamine linker or a phosphate linker;
- wherein n = 0-4, m = 0-4, and m + n is at least 1; and;
- wherein the dye is any reporter group;

(2) a compound of formula II:



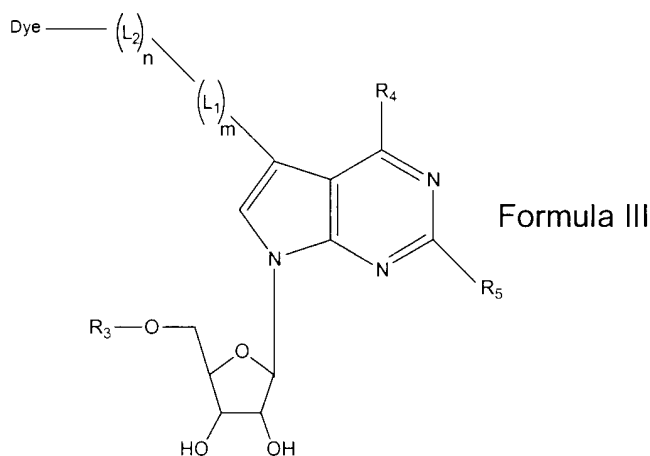
- wherein L is a linker;
- wherein R₄ is either NH₂, OH, or O, and B is either NH₂, OH, or H;

- wherein R_3 is either triphosphate, α -thiotriphosphate, or a salt thereof;

and

- wherein the dye is any reporter group;

(3) a compound of formula III:



- wherein L_1 is a linker;

- wherein L_2 is a benzylamine linker or a phosphate linker;

- wherein $n = 0-4$, $m = 0-4$, and $m + n$ is at least 1;

- wherein R_4 is either NH_2 , OH , or O , and R_5 is either NH_2 , OH , or H ;

- wherein R_3 is either triphosphate, α -thiotriphosphate, or a salt thereof;

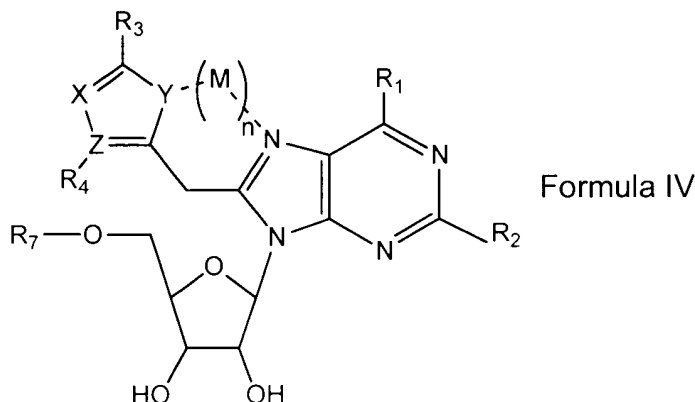
and

- wherein the dye is any reporter group;

(4) a compound of formula IV:

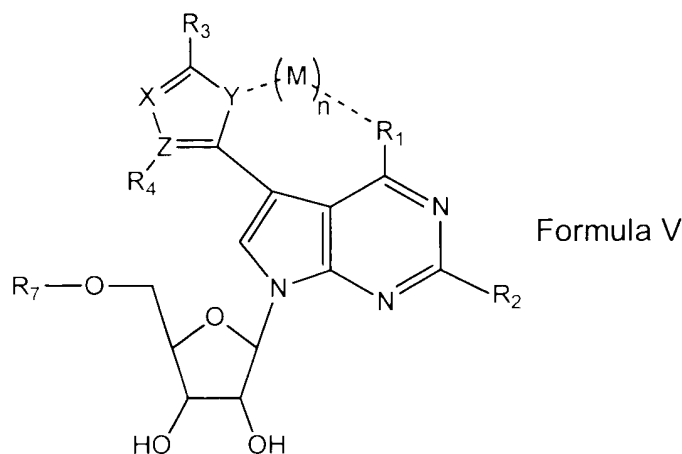
FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com



- wherein R_1 , R_2 , and R_4 are independently H, O, OR, S, SR, NR_2 or CR_2 ;
- wherein R_3 is SR, NR_2 , OR, or CR_2 and comprises a reporter group;
- wherein R is hydrogen, alkyl, aryl, or an amino acid;
- wherein R_7 is either triphosphate, α -thiotriphosphate, or a salt thereof;
- wherein X, Y, and Z are independently carbon, nitrogen, oxygen, sulfur, phosphorus, or selenium;
- wherein n is 0 or 1; and
- wherein M is H_2O or any metal;

(5) a compound of formula V:



- wherein R_1 , R_2 , and R_4 are independently H, O, OR, S, SR, NR_2 or CR_2 ;
- wherein R_3 is SR, NR_2 , OR, or CR_2 and comprises a reporter group;

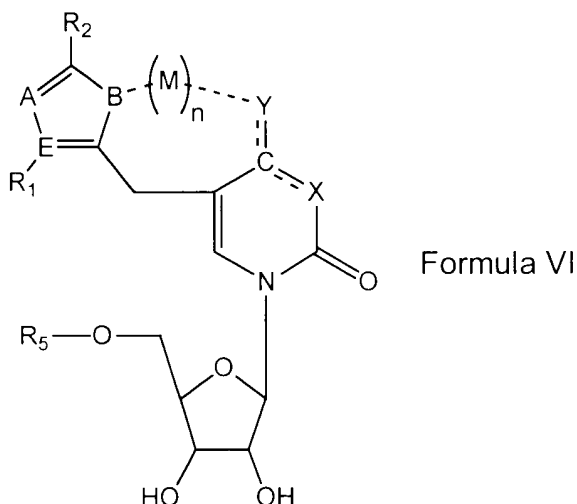
FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1500 I Street, NW
Washington, DC 20005
202.400.4000
Fax 202.400.4400
www.finnegan.com

- wherein R is hydrogen, alkyl, aryl, or an amino acid;
- wherein R₇ is either triphosphate, α-thiotriphosphate, or a salt thereof;
- wherein X, Y, and Z are independently carbon, nitrogen, oxygen, sulfur, phosphorus, or selenium;
- wherein n is 0 or 1; and
- wherein M is H₂O or any metal;

(6) a compound of formula VI:

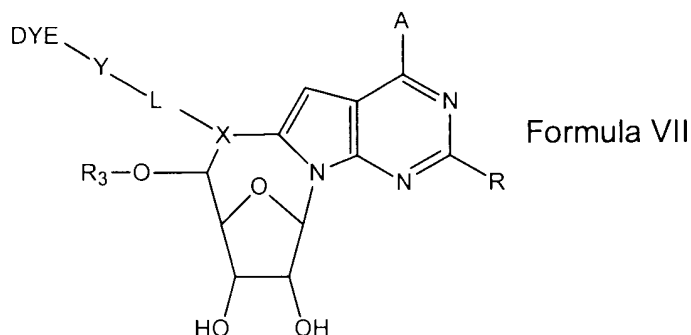
A₂
cont



- wherein R₁ is H, O, OR, S, SR, NR₂, or CR₂,
- wherein R₂ is SR, NR₂, OR, or CR₂ and comprises a reporter group;
- wherein R is hydrogen, alkyl, alkynyl, aryl, or an amino acid;
- wherein R₅ is either triphosphate, α-thiotriphosphate, or a salt thereof;
- wherein X is N, NH, or C;
- wherein Y is O or NH₂;
- wherein A, B, and E are independently C, N, O, S, P, or Se;
- wherein n is 0 or 1; and

- wherein M is H₂O or any metal;

(7) a compound of formula VII:



- wherein A is NH₂, OH, or O;

- wherein R is H, O, NR'₂, S, CR'₂, or halide;

- wherein R' is hydrogen or alkyl;

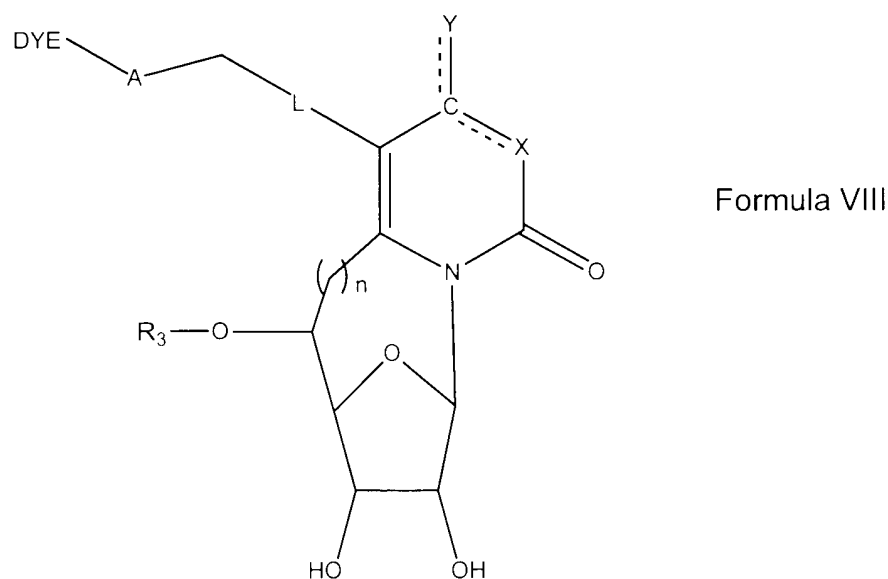
- wherein R₃ is either triphosphate, α-thiotriphosphate, or a salt thereof;

- wherein L is alkyl;

- wherein X is CR or N and Y is O, S, or NH; and

- wherein the dye is any reporter group;

(8) a compound of formula VIII:

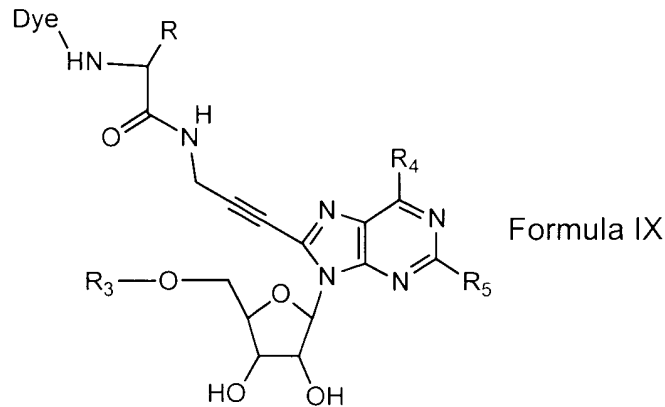


FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1100 I Street, NW
Washington, DC 20005
202.403.4000
Fax 202.403.4400
www.finnegan.com

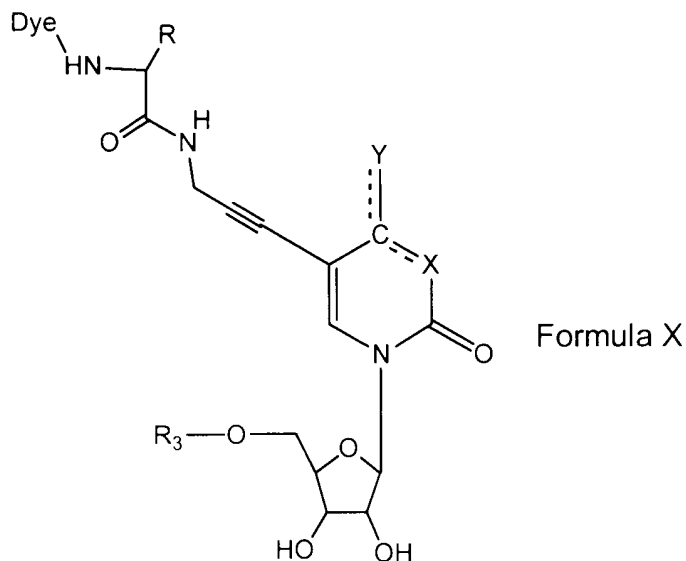
- Q2
cut
- wherein X is N, NH, or C;
 - wherein Y is O or NH₂;
 - wherein R₃ is either triphosphate, α-thiotriphosphate, or a salt thereof;
 - wherein A is O, S, or NH;
 - wherein L is alkyl or aryl substituted at from 0 to 3 positions in a chemically reasonable manner with F, Cl, Br, I, C1-C18 alkyl, Silyl, OH, OR', SH, SR', SOR', SO₂R', SO₃, or NR'₂;
 - wherein R' is hydrogen or alkyl;
 - wherein n is 1 to 10; and
 - wherein the dye is any reporter group;

(9) a compound of formula IX:



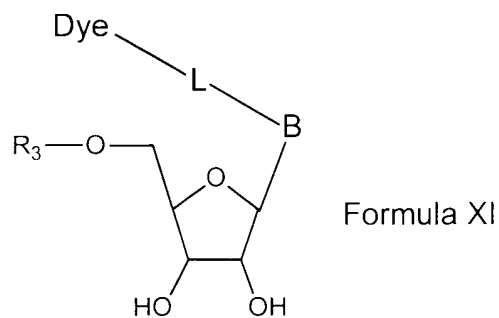
- wherein R₄ is NH₂, OH, or O and R₅ is NH₂, OH, or H, provided that if A is NH₂, B is H and if A is O, B is NH₂;
- wherein R₃ is either triphosphate, α-thiotriphosphate, or a salt thereof;
- wherein the dye is any reporter group; and
- wherein R is a side chain for mobility tuning;

(10) a compound of formula 10:



- wherein X is N, NH, or C;
- wherein Y is O or NH₂;
- wherein R₃ is either triphosphate, α-thiotriphosphate, or a salt thereof;
- wherein Dye is any reporter group, and
- wherein R is a side chain for mobility tuning;

(11) a compound of formula 11:



- wherein B is a nucleobase selected from uracil, cytosine, adenine, 7-deazaadenine, guanine, and 7-deazaguanine;
- wherein R₃ is triphosphate or a salt thereof;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1500 I Street, NW
Washington, DC 20005
202.403.4000
Fax 202.403.4400
www.finnegan.com